Rock Creek Mining District: Upper
Lower and Waterman Ditches
(Antone Mining District)
Near Intersection of U. S. Route 26
and Antone Road
Dayville vicinity
Wheeler County
Oregon

HAER No. OR-9



PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Western Region
National Park Service
U. S. Department of the Interior
San Francisco, California 94102

HISTORIC AMERICAN ENGINEERING RECORD

**Rock Creek Mining District: Upper, Lower and Waterman Ditches**
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Location: Upper Ditch begins 7.9 miles southwest, Lower Ditch begins 7.5 miles southwest, and Waterman Ditch begins 13.2 miles southwest of the intersection of U. S. Route 26 and Antone Road, Wheeler County. Upper Ditch heads circa 6.8 miles, Lower Ditch heads circa 5.2 miles and Waterman Ditch heads circa 11.2 miles in a northeasterly direction paralleling Rock Creek on the east side. Dayville vicinity, Wheeling County, Oregon.

UTM: Upper Ditch - 10.275510.4922310
Lower Ditch - 10.276960.4925050
Waterman Ditch - 10.277740.4923000
Quad: Antone

Dates of Construction: Upper Ditch - 1865; alterations: 1869, circa 1870
Lower Ditch - circa 1870
Waterman Ditch - 1895, alterations: 1932

Engineers: Upper Ditch: A. L. Sutton, John Hodge, James McCoy and Hugh Kennedy.
Lower Ditch: John Ryan, Mark Swinerton and William Andrews or Anderson
Waterman Ditch: E. O. Waterman

Builder: Unknown.

Present Owner: Clinton O. and Flora H. Harris

Present Use: Upper Ditch - agricultural irrigation
Lower Ditch - in disuse
Waterman Ditch - in disuse

Significance: The hydraulicking ditches of the Rock Creek Mining District are early representatives of a hydraulic mining process invented in California in 1852. The ditches preserve an early localized implementation of this technology and vividly depict the methods of placer mining as practiced in Oregon. The ditches also illustrate the important symbiotic relationship between early stock raising and the mining industry.

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In 1852 and 1853, California miners discovered that water under high pressure, directed towards a hillside containing valuable placer gravels, will readily free the desired deposits. "The water was conducted through wooden flumes to the top of a hill sufficiently high so that in falling the water would build up a great 'head' or pressure. The water was made to fall through iron pipes and at the bottom of the hill was shot out through a nozzle with a force great enough to wash away mountains..."[1] After being washed loose, the gold-bearing dirt was run through a long series of sluices designed to separate and hold the gold.

In little more than a decade, this process quickly evolved from a locally-applied Californian technology to a more widespread, standardized industrial process. Almost immediately, hydraulicking came to require a somewhat substantial capital investment, both to construct a system to transport the water needed, and to purchase the patented, mail-order nozzles and pipes. Few mining areas had the suitable topography, or the capital, placer gravel, and access to water in the quantities needed to make this process viable.

The placer deposits of Hope, Mule and Spanish gulches in the Rock Creek Mining District in central Oregon were hydraulically mined. In 1865, Sutton, McCoy and Company had constructed the first ditch, Upper Ditch, to work their placer claims in Spanish Gulch. About 1870, Ryan, Swinerton and Company built Lower Ditch to "water" their claims in Hope and Spanish gulches. As late as 1895, E. O. Waterman had built a third ditch, conveying waters from First, Second, and Fir Tree creeks (tributaries of Rock Creek) to his holdings. These were the only ditches constructed for hydraulicking purposes, which transported water east to the multiple placer claims in the Rock Creek Mining District.

The Upper Ditch of 1865 is particularly significant because it was constructed during the early period in which the hydraulicking technology, recently invented in California, was becoming adopted as a standardized industrial process. That ditch's form and its associated placer mining methodology represent an already well-established technology. This is of special interest, as the hydraulicking process had been developed only thirteen years earlier. The later construction and uses of the Lower and Waterman ditches indicate that this standardized process underwent little localized adaptation despite the passage of over thirty years. The ditches, therefore, provide some insight into the rapid transmission of industrial mining technologies in the American West, and the process of standardization.

The ditches are important in regional and local history as well. In general, various locations throughout the Northwest underwent an intense era of placer hydraulic mining in the 1860s. Central and eastern Oregon became temporarily famous for its mining center in the Blue Mountain region. These yields of placer were probably explored as a byproduct of the larger placer mining activities of Idaho.[2]

The Dalles-Canyon City wagon road was built through the Rock Creek area in the early 1860s, and it was undoubtedly miners travelling east along that route to the Idaho goldfields that discovered the local potential. This area saw the first white settlement in Wheeler County. Mining provided the initial impetus to development and agriculture provided an economic base for permanent settlement.

In March 1864, five Mexican-Americans filed placer claims in a area soon referred to as Spanish Gulch.[3] In January and September, 11 more miners joined the original locators.[4] None of the locators of 1864 completed a ditch from Rock Creek, or hydraulically mined the gulch deposits.

In March 1865, the Rock Creek Mining District was formed and laws were established which defined the procedure of claiming placers and lodes.[5] These new laws also specified filing procedures. It was determined that ditches and flumes should be considered as real estate, which could be sold, transferred or even revoked (through liens of mechanics), provided that the placer mining claims could be conveyed in the same manner.

These duly recorded claims on water rights are the most valuable documentary resource available for reconstructing the history of the ditches. However, they also incorporate a number of inherent biases. They do indicate each time an individual or partnership staked a claim on water and proposed to build a ditch. Unfortunately, there is no guarantee that the claim was ever operative, or that a ditch was actually built. Typically, a tentative construction date may be assigned to each ditch by later claims referring to a by-then constructed ditch. For example, a February 1866 locator claim refers to a ditch already built. For example, a February 1866 locator claim refers to a ditch already built, which can be identified as Upper Ditch.[6] This type of reference allows date assignations for construction of the ditches as do equally brief statements in wills and affidavits. In addition, an 1873 cadastral survey graphically depicts the location of Upper Ditch (then called the McCoy and Owens Mining Ditch).

There are other difficulties with the documentary resources: the ditches' name tend to change frequently, and it is difficult to trace these numerous redesignations. This factor, combined with the multiple claims made on water, has understandably led some researchers to propose that many ditches were constructed from Rock Creek, east to Spanish, Mule and Hope gulches. However, only three mining ditches were constructed in this area. Extensions made at later dates were fairly common, and at least three small reservoirs were also built later.

The greatest fault with the documentary resources in the lack of detail. There is no information on the building of the ditches, their method of construction, or who the laborers were who built them. A few authors have suggested that Chinese laborers dug the ditches.[7] As the Chinese did lease much of the Rock

or Creek Mining District's hydrological operations in the 1890s, it is possible they altered or extended the ditches then. It seems unlikely that Chinese laborers built Upper Ditch (1865) and Lower Ditch (1870). The thirteenth article of the 1865 Rock Creek Mining District laws pointedly excluded "mongolians" from the acquisition of mining (and therefore, water) claims.[8] This article is typical of mining laws throughout the West; such laws were frequently passed before Chines moved into an area. As long as placer workings were moderately active, the exclusion of Chinese from mining was usually complete;ete. This did not exclude them from laboring on ditch construction, but, as there is no indication of a number of Chinese living in the area prior to the nineties, it seems unlikely.[9]

A later construction date for Waterman Ditch (1895) places it in a period when a number of Chinese were known to be involved in hydraulic mining in the District. It is therefore possible that Chinese laborers built that ditch. This would explain the source of the rumors concerning the Chinese constructing the Rock Creek ditches.

The construction dates and multiple ownership transfers of the Upper and Lower ditches clearly depict the cyclical nature of the placer booms of the Rock Creek Mining District. The subsequent leasing of Upper and Lower ditches to Chinese miners, and the ultimate transfer of all three ditches to a non-mining stockman characterize the typical Northwest mining and ranching pattern full cycle.

**Upper Ditch**

In 1865, A. L. Sutton, John Hodge, James McCoy and Hugh Kennedy claimed the waters of Rock Creek for placer mining purposes.[10] Their mining partnership was the first to complete a ditch from Rock Creek to their holdings in Spanish Gulch. The ditch was initially referred to as either the Rock Creek Mining Company Ditch, Sutton and Company Ditch, or Sutton and McCoy and Company Ditch.[11] As was typical of nineteenth century mining enterprises, the company membership frequently underwent changes. Within four years, there had been five major revisions in the partnership.

A. L. Sutton had been the leading mining investor in the District's early history. He located and purchased a number of claims and apparently had a large financial role in the construction of Upper Ditch. By 1867, Sutton had left and, for the next seven years, the McCoy brothers, James and John, were the principal partners in the company. During their tenure, the ditch was often identified as the McCoy and Company Ditch.[12]

In 1869, McCoy and Company again filed for water rights. They claimed the water of the West Fork of Rock Creek with an intent to convey it to their already constructed ditch. This indicates the date of construction of that portion of the

ditch in the southern half of the southeast quarter of section 22 (T. 13 S., R. 24 E.).[13] In the summer of 1873, the deputy surveyor, Jason Owen, mapped the McCoy and Company ditch. The surveyor's completed map coincides well with the present location of Upper Ditch.[14]

Between 1865 and 1874, McCoy and Company included the abovementioned investors as well as Freedom Rice, W. H. Hooper, a Mr. McCann, F. C. Horsley and C. N. Thornberry. These co-owners purchased into the company for brief periods, sometimes selling their shares to reinvest in other mining ventures in the Rock Creek Mining District. McCoy and Company had the largest corporate operations in Spanish Gulch; the completion of Upper Ditch, and the subsequent construction of associated reservoirs obviously played a critical role in the success of their placer mining activities. Other companies' claims were frequently "laid over" for lack of water to work their placer deposits; this occurred only once to McCoy and Company.[15]

In 1874 and 1875, a new crop of miners began working the placers of Spanish Gulch while only a few formerly-established claimants were still active. The latter included John McCoy and Antone Francisco, then sole owners of Upper Ditch. Between 1874 and the late 1880s, the placer deposits of Spanish Gulch were worked by far fewer miners than in the previous era. Beginning in the mid-1870s, the principal partnership in Spanish Gulch was between Milton and James Lasswell, John Erickson and George Owens.

John McCoy sold his interest in the McCoy and Company holdings to John Erickson and George Owens in 1877.[16] Erickson and Owens probably extended Upper Ditch north to their Lake Reservoir soon thereafter. In 1885, James Lasswell acquired Francisco's share of Upper Ditch and placer properties of the completely dismantled McCoy and Company partnership.[17] At James Lasswell's death, his widow, A. M., retained a quarter share in Upper Ditch and extensive placer holdings and conveyed to her brother-in-law Milton a quarter interest in the same.[18]

By 1892, Erickson was using Upper Ditch to irrigate his newly-acquired properties. Undoubtedly, he built smaller feeder ditches off the historic ditch in order to effectively water his new acreage. James Lasswell had also acquired a homestead between Rock Creek and Spanish Gulch.[19] In the last decade of the nineteenth century, he, and later A. M. Lasswell, were also irrigating their properties with water conveyed by Upper Ditch and, like Erickson, had probably dug new outlets for the Rock Creek waters.

In 1895, Erickson, A. M. Lasswell, and Milton Lasswell leased all of their mining properties and water rights to the Chinese partnership known as Loy Yick Company.[20] This lease, which included Upper Ditch, was established for a ten-year period. Stipulations involving the ditch allowed John Erickson and

A. M. Lasswell the privilege of using waters from the Spanish Gulch reservoir (presumably at or near the terminus of Upper Ditch) to irrigate the cultivated fields on their farms, and Owens was granted sufficient water to irrigate the garden spot at his Spanish Gulch residence. On July 26, 1866, an Act was passed by Congress (43 U.S.C. 661) which recognized the vesting of water rights by local customs and laws. In central Oregon, the first user of specific waters acquired priority usage of them. Agricultural use of water was allotted by amount used to irrigate the initial acreage. The interplay between miners' and stockmens' water interests and rivalry over access to water, especially among the stockmen, led to prolonged adjudication of those rights throughout the West. In central Oregon, water rights were adjudicated in 1927-29 with the result that irrigation rights superseded mining water rights. Those claimants conveying water for mining purposes were only allowed to tap into the water supply during the non-irrigation season.

During the late 1920s, Upper Ditch was being used by two farmers, Rowena Erickson (John's widow) and Paul Owens (George's son). In a suit over Rock Creek waters, it was decided that Rowena had been irrigating their property in sections 12 and 14 (T. 13 S., R. 24 E.) since the 1880s.[21]

In 1893, George Owens acquired 160 acres of land in section 6 (T. 13 S., R. 25 E.). It does not appear he drew on the waters from Upper Ditch for irrigation purposes, as Paul Owens was denied water rights in a 1929 hearing. Apparently the Owenses had not begun employing waters for a non-mining use until after 1909, and therefore another claimant downstream was found to have priority.

In 1954, Clinton and Flora Harris acquired a large amount of property in the Rock Creek area, including water rights and portions of Upper Ditch, and have continued to use the ditch for irrigation purposes.

**Lower Ditch**

Chain of title and information concerning Lower Ditch is far less complete than for Upper Ditch. On June 13, 1870, John Ryan, William Anderson, C. Thornberry, Freedom Rice, and Mark Swinerton filed five claims in Hope Gulch. That same day, John Ryan filed for Rock Creek water rights subsequent to the rights of McCoy and Company.[22] His intent was to build a ditch downstream of Upper Ditch, probably to "water" the newly-acquired Hope Gulch claims. Limited post-1870 sources indicate that Ryan did build the ditch.[23] Ryan disappears from the official mining and water rights records after 1870 and transfer of the water rights and newly-built ditch is not recorded.

Lower Ditch employed water from Lake Reservoir, now called Rock Creek Lake. The reservoir was apparently constructed sometime between 1870 (the ditch's earliest possible construction date) and 1874 (at that time, John Erickson sold part of

his interest in the lake's water rights to Sam Kern).[24] In an attempt to verify water privileges for Erickson and Company, Milton Lasswell provided an affidavit in which he confirmed that John Erickson, James Lasswell, George Owens and Antone Sanfrisco (Francisco) built the reservoir, speculating it was constructed approximately in 1876. This partnership also acquired Lower Ditch at approximately the same time. Oddly enough, Lower Ditch does not show up on the 1873 cadastral survey, despite the fact the deputy surveyor should have crossed it six times.[25] This lapse can probably be explained by the fact that McCoy and Company's claims were laid over for lack of water that year. If they were with little water, it seems likely that Lower Ditch, downstream from McCoy and Company's Upper Ditch, was dry.

The fact that the reservoir was built sometime between 1870-74, and that Erickson, Lasswell, Owens and Francisco are identified as the builders, suggests that Ryan and Company had at least partially transferred their interests in Lower Ditch to Erickson et. al. prior to 1874. The new owners, like Ryan, owned placer claims in Hope Gulch, and presumably Lower Ditch continued "watering" them.

Sam Kern's acquisition of interests in Lake Reservoir, and his placer claims in Spanish and Hope gulches, also suggest that he was using Lower Ditch to water his placer deposits. Whether this necessitated separate ditch terminus features is uncertain. As in the case of Ryan and Swinerton, Kern disappears from the Rock Creek mining records without an account of the conveyance of his holdings. However, by 1895, it is obvious that Erickson, the Lasswells and the Owenses are the sole owners. This ditch, like Upper Ditch, was also leased to the Loy Yick Company by the Erickson partnership in 1895, with the same stipulations as previously described for Upper Ditch. In 1903-1904, the various partners of Erickson and Company sold the ditch and its water rights to George Trosper; thereafter Lower Ditch was used exclusively for irrigation.[26]

In 1929, during the water rights adjudications, George Trosper specified 1899 as "a date of relative priority", suggesting that this was the first year the members of the Erickson partnership had used to ditch to irrigate.[27]

In 1954, Lower Ditch and its water rights were acquired by Clinton and Flora Harris. It is then this ditch is thought to have gone into disuse.

**Waterman Ditch**

From the 1890s through 1920, a third series of miners became active in Spanish Gulch and, throughout this period, many placer and quartz claims were filed. Placer claiming flurries occurred during the 1930s and after World War II. Throughout these periods, Everett O. Waterman was one of the dominant hydraulickers.

On June 8, 1892, Waterman filed for water rights on First, Second and Fir Tree creeks. These creeks are small tributaries to Rock Creek, which feed into it about 2-1/2 miles upstream of Lower Ditch's diversion point. Waterman's claim on these waters was strictly for mining purposes.[28] By 1895, he had constructed the lengthy Waterman Ditch and was successfully "watering" his placer claims in Spanish Gulch. In September 1932, he extended the head of the ditch upstream from Fir Tree Creek to Rock Creek.[29] From 1932 until 1954, Waterman continued using the ditch for hydraulicking purposes. In 1954, the Harrises acquired it and allowed it to go dry.

**Physical Description**

Upper, Lower and Waterman Ditches share similar configurations. Over most of their length, they are cut into the hillsides, resulting in low earthen berms. Depending upon the amount of siltation that has occurred, the ditches measure from 12 to 36 inches deep, and from 5 to 6 feet wide from the hillside to the top of the berm. In short rocky stretches, the rock was broken up and incorporated into he berm, but does not appear systematically placed. Large diameter (24 inches) iron pipe was used at the diversion points, and to cross minor untapped drainages and long rocky areas. These mail-order pipes came in 10-foot lengths, were constructed of wrought iron, painted black and welded together. Some pipe has been replaced more recently with wooden flumes lined with plastic sheeting. Exact terminations of the ditches have been obscured by later mining and agricultural enterprises.

Upper Ditch originally drew water from the east side of Rock Creek, at about 4,300 foot elevation. A small concrete dam and iron head gate were used to direct water into the pipe at the diversion point. The ditch proceeds roughly north/northeast some 5.6 miles along the Ochoco foothills, slowly dropping in elevation until it reaches the "mining ground" in Spanish Gulch. Later alterations (1869 and circa 1877) extended Upper Ditch 1.2 miles from Rock Creek Lake (Lake Reservoir) to the original diversion point.

Lower Ditch originates on the east side of Rock Creek at about 3,960 foot elevation. An iron pipe is in place in the creek, but other parts of the diversion structure are gone. Lower Ditch proceeds north/northeast for 5.2 miles, dropping slowly in elevation, to the "mining ground" in Hope Gulch.

Waterman Ditch originated at Fir Tree Creek, a tributary of Rock Creek, at about 4,940 foot elevation. Evidence of the diversion structures no longer exists. The ditch runs roughly north/northeast about 9.6 miles to its terminus in Spanish Gulch. A later addition (ca. 1932) extended it upstream some 1.6 ditch miles to divert Rock Creek at an elevation of about 5,000 feet.

## Conclusion

The history of Upper, Lower and Waterman ditches confirms the role of mining and ranching as important factors in the settlement and peopling of central Oregon. The rapid turnover in miners (with the exception of E. O. Waterman) readily depicts their pattern of extreme mobility throughout the 19th century. Near the end of the earliest peak placer mining episode, nearly all of the miners elected to leave the area (i.e., all of the McCoy and Company partners). During that period, it is probable that there were reports of possible booms in other areas which lured these hydraulickers away.

As the century came to a close, the second series of miners tended to remain in the Rock Creek area and to become ranchers, despite the fact that the ores of the area were not depleted. Mining expenses have been prohibitive on occasion, as in any other area the viability of mining depended upon fluctuations in the gold market. Because of the gradually acquired knowledge that the Spanish Gulch placers were not a "bonanza," the interest in hydraulicking as a profession apparently waned, though it was still possible to subsist as a miner. The area is now owned by a single, large ranching concern, and there is little apparent interest in the minerals located on their land.

The lack of change in hydraulicking technology is another noteworthy feature of Spanish Gulch mining enterprises. The surprising absence of modifications may be due to a variety of local factors or may equally be a part of a larger, regional pattern. The lack of technological change at the site over time remains one of the most intriguing attributes of the ditches in the Rock Creek Mining District.

## Footnotes

1 Paul, Rodman Wilson, Mining Frontiers of the Far West, 1848-1880, San Francisco: Holt, Rinehart and Winston, 1963.

2 Ibid., p. 149.

3 Wasco County Records, Mining Records, Vol. 1, Quartz Lode Claim, p. 195.

4 Ibid., pp. 222-225.

5 Rock Creek Record Book, Oregon State Archives, p. 1-11.

6 Grant County Records, Rock Creek Mining District, Mining Records, Vol. C:196.

7 c.f. Joseph Porter Dobell, "Geology of the Antone District of Wheeler County, Oregon," Oregon State College, Master of Science Thesis, 1948.

8 Rock Creek Record Book, Oregon State Archives, p. 10.

9 c.f. United States Department of Commerce, Bureau of Census, Ninth Census of the United States and Tenth Census of the United States.

10 Rock Creek Record Book, Oregon State Archives, pp.23-24.

11 Ibid., p. 126; and Grant County Records, Rock Creek Mining District, Mining Records, Vol. A:118; Vol. C:23 and 196.

12 Ibid., Vol. C:419.

13 Ibid., Vol. C:419.

14 Jason Owen, General Land Office Original Survey Maps, T. 24 S., R. 13 E., Bureau of Land Management, Prineville District, 1873.

15 Grant County Records, Rock Creek Mining District, Mining Records, Vol. C:573.

16 Ibid., Vol. B:711.

17 Ibid., Vol. C:2.

18 Wheeler County Records, Mining Records, Vol. 8:147-148 (Milton Lasswell's affidavit).

19 United States Department of the Interior, Bureau of Land Management, Master Title Plats, historical index 1896, Prineville, Oregon.

20 Grant County Records, Rock Creek Mining District, Mining Records, Vol. C:120-121.

21 Grant County Records, Water Rights Records, Contest No. 43, p. 48.

22 Rock Creek Record Book, Oregon State Archives, p. 37.

23 c.f. op. cit. Milton Lasswell's affidavit, and Grant County Records, Rock Creek Mining District, Mining Records, Vol. B:467.

24 Grant County Records, Rock Creek Mining District, Mining Records, Vol. B:607.

25 c.f. Jason Owen, General Land Office, Original Survey Notes, T. 24 S., R. 13 E., Bureau of Land Management, Prineville District, pp. 389, 391, 392, 395.

26 c.f. op. cit. Milton Lasswell's affidavit.

27 Grant County Records, Water Rights Records, Contest No. 38, pp. 45-46.

28 Grant County Records, Water Rights Records, Claim No. 15978, p. 2.

29 Ibid., Claim No. 11475, p. 2.

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1982 "An Historical Assessment and Recommendations for Management of the Spanish Gulch Mining District, Wheeler County, Oregon," manuscript on file, U. S. Department of the Interior, Bureau of Land Management, Prineville District, Prineville, Oregon.

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